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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/265,493

03/09/1999

DAVID C. TANNENBAUM

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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)

CIRA CENTRE, 12TH FLOOR

2929 ARCH STREET

PHILADELPHIA, PA 19104-2891

EXAMINER

BRIER, JEFFERY A

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/265,493	<b>Applicant(s)</b> TANNENBAUM, DAVID C.	
	<b>Examiner</b> Jeffery A. Brier	<b>Art Unit</b> 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on 07/08/2009 has been entered. The claim amendments overcome the claim objections, the claim rejection under 35 USC 112 second paragraph, and part a) of the 35 USC 101 rejection all set forth in the office action mailed on 03/16/2009.

### ***Response to Arguments***

2. Applicant's arguments filed 07/08/2009 with regard to the objection to specification and to the 35 USC 101 rejection part b) have been fully considered but they are not persuasive.

#### **Specification**

At pages 6 and 7 applicant first argues Examiner's previous argument set forth in the office action mailed on 03/16/2009. This portion of applicants argument concerning the objection to the specification is not persuasive because the phrase on page 5 of applicants specification has a meaning that is not clearly "ascertainable by reference to the description" with regard to the claimed term "surface normal vector". Page 5 line 2 of applicants specification lists "N = outward surface normal vector at a pixel" which is different than the claimed "a surface normal vector". The list of parameters on pages 4 and 5 includes "N = outward surface normal vector at the pixel" for a pixel while claim 6 with reference to claim 3 lists "a surface normal vector" for a vertex. The parameter for a pixel (N = outward surface normal vector at the pixel) discussed in the background of the invention at pages 4 and 5 is different than the parameter for a vertex (a surface

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normal vector) claimed in claim 6, thus, the background description cannot be used to provide proper antecedent basis for the claimed subject matter due to the differences in words used in the claim and the background of the invention and due to the difference between pixel (pages 4 and 5) discussed in the background description and vertex (page 12) discussed in detailed description.

At pages 7 and 8 applicant then argues the requirement for clear antecedent basis in the claims applies to only new or amended claims. This argument is not persuasive because the requirement to have clear antecedent basis for claim terms applies to the specification with regard to original claims. See 37 CFR 1.175(d)(1) and MPEP 608.01(o).

**§ 1.75 Claim(s).** Rev. 7, July 2008

(d)(1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a)).

**608.01(o)Basis for Claim Terminology in Description [R-3] (emphasis added)**

The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import; and in mechanical cases, it should be identified in the descriptive portion of the specification by reference to the drawing, designating the part or parts therein to which the term applies. A term used in the claims may be given a special meaning in the description. \*\*>See MPEP § 2111.01 and § 2173.05(a).<

Usually the terminology of the original claims follows the nomenclature of the specification, but sometimes in amending the claims or in adding new claims, new terms are introduced that do not appear in the specification. The use of a confusing variety of terms for the same thing should not be permitted.

.....

The specification should be objected to if it does not provide proper antecedent basis for the claims by using form paragraph 7.44.

#### Claim Rejections - 35 USC § 101

Applicants arguments concerning part b) of the 35 USC 101 rejection are not persuasive because claiming in the independent claims "A method for use a computer graphics system" does not tie the method to a particular machine no more than claiming the Internet did in *Every Penny Counts, Inc., Plaintiff, v. Bank of America Corporation, and Bank of America, N.A., Defendants*; UNITED STATES DISTRICT COURT MIDDLE DISTRICT OF FLORIDA FORT MYERS DIVISION; Case No. 2:07-cv-042. A computer graphics system is a very broad type of system. Claiming "for use a computer graphics system" does not tie the critical method steps to a particular machine because the actor performing the critical steps may be a human operator where the computer graphics system merely presents data for the human operator to process in the claimed abstract mathematical process. The human operator performs the following claimed method steps of claim 1: "receiving", "selecting", "substituting", and "determining" with the last step "storing" considered to be insignificant extra-solution activity not critical to the solution.

#### ***Claim Objections***

3. Claims 1-9 are objected to because of the following informalities: at line 1 of claim 1 "for use a" should be "for use in a". Appropriate correction is required.

***Specification***

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The limitation found in claims 6, 12, and 16 “a surface normal vector” is not found in the specification, refer to applicants specification at page 12 last line to page 13 line 4. Applicant may be able to add “a surface normal vector” to the list of per-primitive parameters listed at page 12 last line to page 13 line 4.

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Method claims 1-9:

Supreme Court precedent<sup>1</sup> and recent Federal Circuit decisions<sup>2</sup> indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject

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<sup>1</sup> *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

<sup>2</sup> *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

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matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

In view of August 24, 2009 interim patent subject matter eligibility examination instructions the previous part b) 35 USC 101 analysis is maintained which analysis renders the claim patent ineligible because the critical method steps 1) are not tied to a particular machine or 2) transform underlying subject matter. The instructions may be viewed at: [http://www.uspto.gov/web/offices/pac/dapp/opla/2009-08-25\\_interim\\_101\\_instructions.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/2009-08-25_interim_101_instructions.pdf).

These method claims do not tie the method to 1) a particular apparatus or 2) transform underlying subject matter.

1) a particular apparatus

Claiming "for use a computer graphics system" does not tie the critical method steps to a particular machine because the actor performing the critical steps may be a human operator where the computer graphics system merely presents data for the human operator to process in the claimed abstract mathematical process. The human operator performs the following claimed method steps of claim 1: "receiving", "selecting", "substituting", and "determining" with the last step "storing" considered to be insignificant extra-solution activity not critical to the solution. With regard to claim 2 displaying the pixel is also considered to be insignificant extra-solution activity not critical to the solution. With regard to claims 3-6 and 9 the type of data is defined which does not 1) tie the method to a particular machine or 2) transform underlying subject matter. With regard to claim 7 a texture value is determined which is considered to be

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insignificant extra-solution activity not critical to the solution and which does not 1) tie the method to a particular machine or 2) transform underlying subject matter. With regard to claim 8 which further define claim 7 by filtering the textures elements onto the pixel is considered to be an abstract mathematical step performed by the human operator.

2) transform underlying subject matter

The method claims do not claim any physical transformation with the last step "storing" the pixel is considered to be insignificant extra-solution activity not critical to the solution. With regard to claim 2 displaying the pixel is also considered to be insignificant extra-solution activity not critical to the solution.

***Allowable Subject Matter***

7. Claims 10-20 are allowed.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A. Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:30 to 4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached at (571) 272-7661. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jeffery A. Brier/  
Primary Examiner, Art Unit 2628

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